RECEIVED
CENTRAL FAX CENTER
JAN 0 8 2007

## **Amendment to the Claims**

Claims 1 - 22. (Canceled)

23. (Currently amended): A bacterial cell The bacterial cell of claim 21, further comprising a first isolated nucleic acid molecule encoding a polypeptide having 2,5-diketo-D-gluconic acid (2,5-DKG) permease activity and at least 95% sequence identity to SEQ ID NO:12 and an second isolated nucleic acid molecule encoding a polypeptide having 5-keto reductase activity, said polypetide having at least 95% sequence identity to SEQ ID NO: 16, wherein said bacterial cell is deficient in endogenous 2,5-DKG permease activity.

Claims 24 - 35. (Canceled)

- 36. (Previously presented): A method of enhancing 2-keto-L-gulonic acid (2-KLG) production, comprising a) introducing an isolated nucleic acid molecule encoding a polypeptide having at least 95% sequence identity to SEQ ID NO: 12 into a bacterial cell which expresses an enzyme that catalyzes the conversion of 2,5-diketo-D-gluconic acid (2,5-DKG) to 2-KLG, b) allowing expression of the polypeptide encoded by said nucleic acid molecule and c) culturing the bacterial cell under suitable conditions to produce 2-KLG.
- 37. (Original): The method of claim 36, wherein said bacterial cell further expresses enzymes that catalyze the conversion of glucose to 2,5-DKG.
- 38. (Original): The method of claim 37, wherein said bacterial cell is deficient in endogenous 2-keto reductase activity.
- 39. (Original): The method of claim 36, wherein said bacterial cell is of the genus Pantoea.
- 40. (Original): The method of claim 36, further comprising converting said 2-KLG to ascorbic acid.

Claims 41 - 48. (Canceled)

- 49. (Previously presented): The bacterial cell of claim 15, which is an E. coli cell.
- 50. (Canceled)
- 51. (Previously presented): The method of claim 36, wherein the nucleic acid molecule has the sequence of SEQ ID NO: 11 or a sequence having at least 95% sequence identity thereto.
- 52. (Previously presented): A method for increasing the transport of 2, 5 diketo-D-gluconic acid (2, 5 DKG) across a cell membrane into a bacterial host cell comprising a) introducing an isolated nucleic acid molecule into a bacterial host cell, wherein the nucleic acid molecule encodes a protein comprising at least 95% sequence identity to SEQ ID NO: 12 and said protein having 2,5 DKG permease activity, b) allowing expression of the protein and c) culturing the bacterial host cell under suitable conditions for the transport of 2,5-DKG into the bacterial host cell.
- 53. (Previously presented): The method according to claim 52, wherein the bacterial host cell is an *E. coli*, *Pantoea* or *Klebsiella* host cell.
- 54. (Canceled)
- 55. (Previously presented): The method according to claim 52, wherein the nucleic acid molecule has the sequence of SEQ ID NO: 11 or a sequence having at least 95% sequence identity thereto.
- 56. (Canceled)
- 57. (Currently amended): The method according to claim 36, wherein said polypetide polypeptide has the sequence of SEQ ID NO: 12.
- 58. (Previously presented): The method according to claim 36, wherein the bacterial host cell is an *E. coli*, *Pantoea* or *Klebsiella* host cell.

- 59. (Currently amended): The method according to claim 52, wherein said polypetide polypeptide has the sequence of SEQ ID NO: 12.
- 60. (Previously presented): The method according to claim 53, wherein the bacterial host cell is a *Klebsiella* cell.
- 61. (Currently amended): The method according to claim 53, wherein the bacterial host cell is an *E. coli* cell.
- 62. (Currently amended): The method according to claim 53, wherein the bacterial host cell is a *Pantoea* cell.
- 63. (Previously presented): The method according to claim 53, wherein the bacterial host cell is deficient in endogenous 2,5 DKG permease activity.
- 64: (Previously presented): The method according to claim 53, wherein the bacterial host cell further comprises a nucleic acid molecule encoding a polypeptide having 2-keto reductase activity and at least 95% sequence identity to SEQ ID NO: 14.
- 65. (Previously presented): The method according to claim 53, wherein the bacterial host cell further comprises an isolated nucleic acid molecule having 5-keto reductase activity and at least 95% sequence identity to SEQ ID NO: 16.
- 66. (Currently amended): The method according to claim 53, wherein the bacterial host cell expresses an enzyme that catalyzed catalyzes the conversion of 2,5-DKG to 2-keto-L-gulonic acid (2-KLG).
- 67. (Currently amended): The method according to claim 53, wherein the nucleic acid molecule encoding the protein having 2,5-DKG permease activity is operably linked to a lac promoter.
- 68. (New): The method of claim 36, wherein the nucleic acid molecule encodes a polypeptide having at least 98% sequence identity to SEQ ID NO: 12.

687-3D1AM 01-07

- 69. (New): The method of claim 68, wherein the nucleic acid molecule encodes a polypeptide having at least 99% sequence identity to SEQ ID NO: 12.
- 70. (New): The bacterial cell of claim 23, wherein said cell is from the genus Pantoea.
- 71. (New): The bacterial cell of claim 23, wherein the first nucleic acid molecule encodes a polypeptide having at least 98% sequence identity to SEQ ID NO:12 and the second nucleic acid encodes a polypeptide having at least 98% sequence identity to SEQ ID NO:16.
- 72. (New): The method of claim 52, wherein the nucleic acid molecule encodes a polypeptide having at least 98% sequence Identity to SEQ ID NO: 12.
- 73. (New): The method of claim 72, wherein the nucleic acid molecule encodes a polypeptide having at least 99% sequence identity to SEQ ID NO: 12.